

L Number	Hits	Search Text	DB	Time stamp
-	6489	decimat???	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 09:54
-	480	undersampling	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 09:54
-	9	decimat??? same undersampling	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 09:57
-	1487226	down	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 09:57
-	1254748	conver???	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 09:57
-	8384	down adj conver???	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 09:57
-	2773	downconver???	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 10:03
-	10486	(down adj conver???) or downconver???	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 09:57
-	136	decimat??? same ((down adj conver???) or downconver???)	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 09:59
-	33553	harmonics	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 10:02
-	30	((down adj conver???) or downconver???) with harmonics	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 10:00
-	26	decimat??? with harmonics	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 10:05
-	0	(decimat??? same undersampling) same harmonics	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 10:06
-	98610	reversal	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 10:06
-	2	undersampling same reversal	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 10:07
-	611	sub-nyquist	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 10:08
-	4	harmonics with sub-nyquist	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 10:11

-	2	4831463.pn.	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 10:09
-	316114	folded	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 10:11
-	20	decimat??? with folded	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 11:34
-	21557	"recorded medium"	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 11:35
-	1506446	advantages	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 11:36
-	11	"recorded medium" with advantages	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 11:36
-	708845	program	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 11:37
-	227405	sampling	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 11:37
-	3271	program with sampling	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 11:37
-	301330	software	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 11:37
-	156	(program with sampling) with software	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 11:41
-	20507	"stored program"	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 11:41
-	27	advantages with "stored program"	USPAT; EPO; JPO; DERWENT; IBM_TDB	2004/04/05 11:41

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TITLE: Data sampling method and device

----- KWIC -----

Detailed Description Text - DETX (4):

Referring to FIG. 1B, the analog input signal having the frequency  $f_{IF}$  is sampled at a sampling frequency  $f_s$  and a decimated data string is generated by decimating resulting digital data at a decimation ratio of  $1/4$ . In this case, there occurs the same undersampling effect as would occur when sampling is made at a sampling frequency  $f_{s1}$  ( $f_{s1}=f_s/4$ ) that is lower than the Nyquist frequency. Therefore, the decimated data string has a frequency  $f_{IF1}$  that is lower than the input signal frequency  $f_{IF}$ .

Detailed Description Text - DETX (5):

Referring to FIG. 1C, the analog input signal having the frequency  $f_{IF}$  is sampled at a sampling frequency  $f_s$  and resulting digital data is decimated at a decimation ratio of  $1/8$ . In this case, there occurs the same undersampling effect as would occur when sampling is made at a sampling frequency  $f_{s2}$  ( $f_{s2}=f_s/8$ ) that is lower than the Nyquist frequency. Therefore, the decimated data string has an even lower frequency  $f_{IF2}$ .

Detailed Description Text - DETX (10):

The above discussion is summarized as follows. The sampling frequency  $f_s$  satisfies the Nyquist condition and hence is higher than two times the frequency  $f_{IF}$  of an analog input signal. Even when

undersampling has already  
been performed at a sampling frequency that is lower than  
two times the  
frequency  $f_{IF}$  of the analog input signal, the  
above-described undersampling  
effect can be expected by decimating data thereafter.  
Further, it is possible  
to decrease the frequency of an output digital signal down  
to the baseband  
frequency.